

Application No. 10/084,585
Response to Office Action

Customer No. 01933

R E M A R K S

Reconsideration of this application is respectfully requested.

According to the present invention as recited in claim 1, a camera is provided which comprises a beam splitter configured to divide an incident light from a subject through a photographing lens; an eyepiece lens configured to observe the incident light divided by the beam splitter with a viewfinder; a relay lens provided between the beam splitter and the eyepiece lens; and a shutter provided in a vicinity of the relay lens and configured to cut a reverse-incident light from the eyepiece lens.

According to the present invention as recited in independent claim 3, moreover, a camera is provided which comprises a beam splitter configured to divide an incident light from a subject through a photographing lens; an eyepiece lens configured to observe the incident light divided by the beam splitter with a viewfinder; a relay lens provided between the beam splitter and the eyepiece lens and having a plurality of lenses; and a shutter provided between the plurality of lenses of the relay lens and configured to cut a reverse-incident light from the eyepiece lens.

As explained on pages 34-37 of the specification, since it is desirable to miniaturize digital cameras, it is advantageous to minimize the movement range of the eyepiece shutter between

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the beam splitter and the eyepiece lens, because the smaller the range to be opened and closed, the more the eyepiece shutter can be miniaturized.

As shown in Figs. 2 and 5, for example, the subject image from the focusing board 16 is re-formed and reversed by the relay lens 18, and therefore the light flux to the eyepiece lens 3 from the beam splitter 14 is narrowest in the vicinity of the relay lens 18.

For this reason, according to the present invention as recited in claim 1, the shutter is advantageously provided in the vicinity of the relay lens, where the light flux is narrowest and therefore where the movement range required of the shutter is small.

As explained on page 36 of the specification, moreover, an iris is often arranged between lenses of the relay lens 18 (see Fig. 5), and the light flux is narrowest at the position of the iris. According to the present invention as recited in independent claim 5, therefore, the shutter is advantageously arranged between lenses of the relay lens so as to allow the shutter to be further miniaturized.

In addition, it is noted that the claimed present invention is directed to a camera that requires a long optical path to the viewfinder optical system due to the layout of the mechanisms of the camera. In such cameras, a relay lens must be provided to

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extend the optical path to the viewfinder, and the diameter of the luminous flux can be minimized near the relay lens. Therefore, according to the present invention as recited in independent claims 1 and 3, the shutter is provided in the vicinity of the relay lens or between lenses of the relay lens, where the light flux is narrowest. With this structure, the size of the shutter can be decreased, thereby contributing to the miniaturization of the camera as a whole.

By contrast, it is respectfully submitted that JP 3-184028 ("Saito et al") merely shows an eyepiece shutter mechanism 11 in the TTL finder 6. In the TTL finder 6 of Saito et al, the shutter mechanism 11 is provided between lenses 6b (corresponding to a relay lens) and lenses 6c (corresponding to a loupe lens). Thus, it is respectfully submitted that Saito et al merely shows a shutter mechanism between the relay lens and the eyepiece. Accordingly, Saito et al clearly does not disclose, teach or suggest providing a shutter between lenses of the relay lens, as according to the present invention as recited in independent claim 3.

In addition, it is respectfully submitted that Saito et al does not indicate whether the shutter mechanism is near the relay lens or the loupe lens. Indeed, Fig. 1 of Saito et al shows the shutter mechanism near the lenses 6c. Accordingly, it is respectfully submitted that Saito et al merely discloses the

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known prior art position for the shutter mechanism near the eyepiece. And it is respectfully submitted that Saito et al does not disclose, teach or suggest the feature of the present invention as recited in claim 1, whereby the shutter is provided in a vicinity of the relay lens and configured to cut a reverse-incident light from the eyepiece lens.

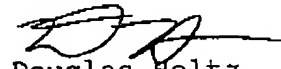
In view of the foregoing, it is respectfully submitted that the present invention as recited in independent claims 1 and 3, as well as claims 2, 4 and 5 depending from claim 1, clearly patentably distinguishes over Saito et al, under 35 USC 102 as well as under 35 USC 103.

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Allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned for prompt action.

Respectfully submitted,


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